● PRINTER RUSH ●
(PTO ASSISTANCE)

Application :	09527343	Examiner :	Wilson	GAU :	2661
From:	ewc	Location:	IDC FMF FDC	Date:	12/11/05

Tracking #: ep/77 09527343   Week Date: 9-19-05

~~ATTN: Chief Draftsperson~~

DOC CODE	DOC DATE	MISCELLANEOUS
☐ 1449	_____	☐ Continuing Data
☐ IDS	_____	☐ Foreign Priority
☐ CLM	_____	☐ Document Legibility
☐ IIFW	_____	☐ Fees
☐ SRFW	_____	☐ Other
☐ DRW	_____	
☐ OATH	_____	
☐ 312	_____	
☒ SPEC	3-17-2000	

[RUSH] **MESSAGE:**_____

The serial number stamp is obscuring data
on pages 81, 82, 83, 84

Thank you

[XRUSH] **RESPONSE:** _____

Fixed

INITIALS: ea

NOTE: This form will be included as part of the official USPTO record, with the Response
document coded as XRUSH.
REV 10/04

Table 15
ADDR=0x012: PM Register

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	--used--							LOS PM	OOF PM	B1 PM	B2 PM	AIS PM	REI PM	RDI PM	Inconsistent J0 PM	Mismatched J0 PM
Mode	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro
Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5

- These bits are set if the corresponding failures occurred since the last 1 second tick.
- See GR-253 sections 6.2.2.3 and 6.2.2.4 for full descriptions of SONET/SDH PMs. Note that the J0 PMs are not defined in the

10   SONET/SDH standards *yet*.

Table 16
ADDR=0x013: B1 Error PM Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	Count															

15   • Contains the B1 error count.

Table 17
ADDR=0x014-0x15: B2 Error PM Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	unused										MSB					
Name	LSB															

20   • Contains the B2 error count.

Table 18
ADDR=0x016-0x17: REI_L PM Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3·	2	1	0
Name	unused											MSB				
Name	LSB															

25   • Contains the REI_L count.

Validated Bytes
- If a new value is of K1/KS or S1 is found and consecutively repeated (3 times for K1/K2 and 8 times for S1) the new value will be stored in the

30   Validated Registers for software to read.
- The first read of these registers will likely result in the actual validated values rather than the default value.

Table 19
ADDR=0x018: Validated K1/K2 Value

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	Validated K1								Validated K2							
Mode	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro
Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- Contains the validated K1 and K2 bytes.

5 •

ADDR=0x019: Validated S1 Value

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	unused								Validated S1							
Mode	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro
Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- Contains the validated S1 synchronization byte.

10

Table 21
ADDR=0x01B: Gigabit Ethernet Invalid Code Word PM Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	Count															

- Contains the number of GBE Invalid Code Words that were detected.

15

Table 22
ADDR=0x01C: Gigabit Ethernet Disparity Error PM Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	Count															

20 • Contains the number of GBE Disparity Errors that were detected.

Table 23
ADDR=0x01D: Gigabit Ethernet Sync Loss PM Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	Count															

25 • This is a count of the transitions from in-sync to out-of-sync.

Table 24
ADDR=0x01E: Combined Gigabit Ethernet PM Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	Count															

30 • The invalid-code and disparity errors are ORed together and the resultant error is counted.

Table 25
ADDR=0x030-0x031: Corrected Ones Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	unused				MSB											
	LSB															

5   • Contains the number of ones that were corrected by the FEC block.

Table 26
ADDR=0x032-0x033: Corrected Zeros Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	unused				MSB											
	LSB															

• Contains the number of zeros that were corrected by the FEC block.

Table 27
ADDR=0x034-0x035: Total Corrected Bits Count

15

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	unused			MSB												
	LSB															

• Contains the total number of bits that were corrected by the FEC block.

20

Table 28
ADDR=0x036-0x037: Total Corrected Bytes Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	unused							MSB								
	LSB															

• Contains the total number of bytes that were corrected by the FEC block.

25

Table 29
ADDR=0x038-0x039: Uncorrectable 255-Byte Block Count

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
Name	unused									MSB						
	LSB															

• Contains the total number of uncorrectable bytes that were detected by
30   the FEC block.

Table 30
ADDR=0x080-0x09F: Expected Section Trace Message

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
080	First byte of message								Second byte of message							
081	Third byte of message								Fourth byte of message							
...					...								...			
09f	63rd byte of message								64th byte of message							
Mode	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw
Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- Contains the expected section trace message that was programmed via software.

Table 31
ADDR=0x0A0-0x0BF: Received Section Trace Message

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0a0	First byte of message								Second byte of message							
0a1	Third byte of message								Fourth byte of message							
...					...								...			
0bf	63rd byte of message								64th byte of message							
Mode	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro	ro
Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- If there is a mismatch interrupt showing, this memory will contain the mismatched message.
- If there are no errors showing, this memory will show the expected message (unless a power-up reset has just occurred).
- If there is an inconsistent interrupt showing, this memory will contain the last valid message, or, if no valid messages have been received since the last reset, random data.

Table 32
ADDR=0x0C0-0x0DF: Transmit Section Trace Message

Bit	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
0c0	First byte of message								Second byte of message							
0c1	Third byte of message								Fourth byte of message							
...					...								...			
0df	63rd byte of message								64th byte of message							
Mode	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw	rw
Default	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

- Contains the section trace message to be transmitted that was programmed via software.

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